

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. – 2. (Cancelled)

3. (Previously Presented) FIR filter apparatus comprising:
an input for receiving an input signal;
an FIR filter comprising a plurality of filter stages,
wherein the plurality of filter stages comprises a first plurality of stages and
a second plurality of stages,

the first plurality of stages receiving a predetermined first portion of the
input signal; and

a delay coupled between two of said plurality of filter stages to delay
application of the input signal to at least one of said filter stages to skip filtering a portion
of the input signal,

said delay providing a variable second portion of the input signal to said
second plurality of stages.

4. (Original) Apparatus according to Claim 3, further comprising a memory
storing a delay value for application to said delay.

5. (Original) Apparatus according to Claim 3, wherein said first plurality of filter stages comprises a plurality of filter blocks, each having a plurality of taps, and wherein said second plurality of stages comprises at least one filter block having a plurality of taps, and

further comprising:

a first plurality of LMS engines which provide a first plurality of weighting coefficients to the taps of said plurality of filter blocks; and

a second LMS engine which provides a second plurality of weighting coefficients to the taps of said at least one filter block.

6. (Original) Apparatus according to Claim 5, wherein said plurality of filter blocks comprises four filter blocks each having 32 taps, and

wherein said at least one filter block comprises one filter block having 32 taps.

7. (Original) FIR filter apparatus comprising:
 - a signal input receiving an input signal;
 - a first block of filter stages having a respective first plurality of taps which receive a respective first plurality of weighting coefficients, for filtering a first portion of the input signal in accordance with the first plurality of weighting coefficients;
 - a second block of filter stages having a respective second plurality of taps which receive a respective second plurality of weighting coefficients, for filtering a second portion of the input signal in accordance with the second plurality of weighting coefficients; and
 - a delay which variably delays application of the second portion of the input signal to the second block of filter stages with respect to the first portion of the input signal.

8. -12. (Cancelled)

13. (Original) FIR filter apparatus comprising:

signal input means for receiving an input signal;

a first block of filter means, having a respective first plurality of taps which receive a respective first plurality of weighting coefficients, for filtering a first portion of the input signal in accordance with the first plurality of weighting coefficients;

a second block of filter means, having a respective second plurality of taps which receive a respective second plurality of weighting coefficients, for filtering a second portion of the input signal in accordance with the second plurality of weighting coefficients; and

delay means for adjustably delaying application of the second portion of the input signal to the second block of filter means with respect to the first portion of the input signal.

14. –17. (Cancelled)

18. (Original) A method of controlling an FIR filter comprising the steps of:

receiving an input signal;

filtering a first portion of the input signal with a first block of filter stages having a respective first plurality of taps which receive a respective first plurality of weighting coefficients, the first portion of the input signal being filtered in accordance with the first plurality of weighting coefficients;

filtering a second portion of the input signal with a second block of filter stages having a respective second plurality of taps which receive a respective second plurality of weighting coefficients, the second portion of the input signal being filtered in accordance with the second plurality of weighting coefficients; and

adjustably delaying application of the second portion of the input signal to the second block of filter stages with respect to the first portion of the input signal.

19. – 46. (Canceled)